

L. Kennedy,

Bee Hive,

N^o 4,513.

Patented Feb. 9, 1864.

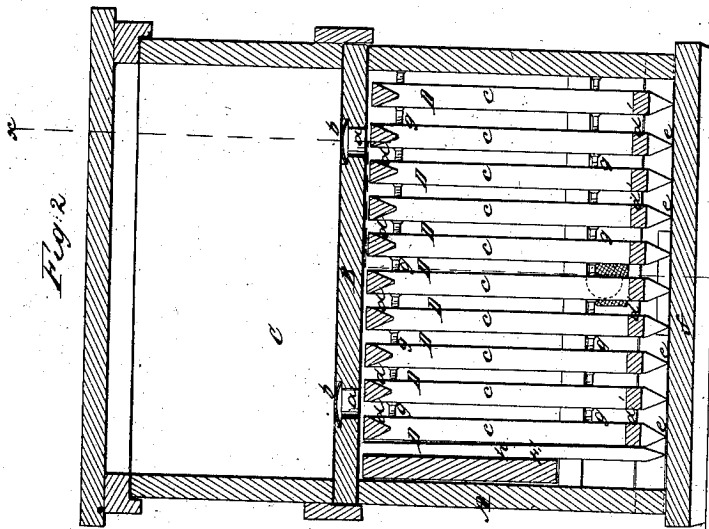


Fig. 2

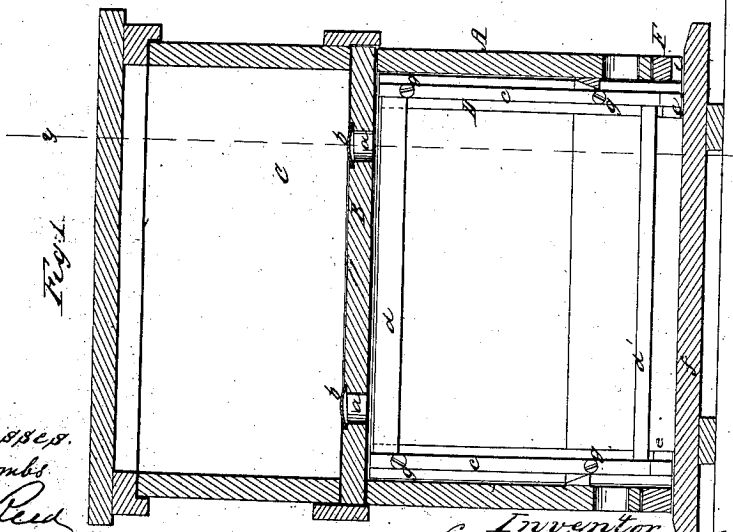


Fig. 1

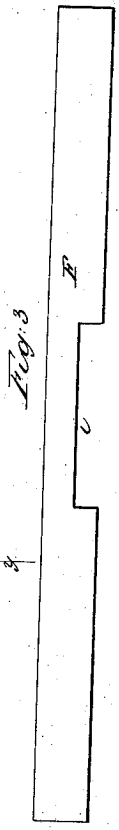


Fig. 3

Witnesses
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UNITED STATES PATENT OFFICE.

LEONARD KENNEDY, OF HARTFORD, CONNECTICUT.

IMPROVEMENT IN BEE-HIVES.

Specification forming part of Letters Patent No. 41,513, dated February 9, 1864.

To all whom it may concern:

Be it known that I, LEONARD KENNEDY, of Hartford, in the county of Hartford and State of Connecticut, have invented a new and Improved Bee-Hive; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a vertical section of my invention, taken in the line *x x*, Fig. 2; Fig. 2, a vertical section of the same, taken in the line *y y*, Fig. 1; Fig. 3, a detached front view of the removable strip in which the bee-entrances are made.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to a peculiar arrangement of the comb-frames of the hives, as hereinafter fully shown and described, whereby the least possible surface of said frames is brought in contact with the hive or box in which they may be placed, and the frames rendered capable of being removed from the hive when necessary without annoying or exasperating the bees, the frames being also capable of being adjusted at a greater or less distance apart, as occasion may require, and with the greatest facility, and the frames at the same time when adjusted in the desired position held therein in a secure manner, so as to effectually avoid casual displacement.

The invention also relates to a novel and improved means for obtaining bee-entrances of different capacities, as hereinafter fully shown and described, whereby the use of slides, which possess some disadvantages, is avoided.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents a square or rectangular box, which forms the body of the hive, and B is a horizontal board placed thereon, which forms the top of the hive. On this top board, B, there may be placed a box, C, to receive the spare-honey boxes, openings *a* being made in B to allow the bees to pass through. These openings are covered by small plates *b* when they are required to be closed.

D represents the comb-frames, which are of quadrilateral form, being composed of two side pieces or bars, *c c*, connected at their upper ends by a cross-bar, *d*, and connected near

their lower ends by a cross-bar, *d'*. The side pieces or bars, *c c*, extend down a trifle below the lower cross-bar, *d'*, and then are chamfered at two opposite sides, so as to form narrow edges *e* to rest on the bottom *f* of the hive, as shown clearly in Fig. 2.

The comb-frames are somewhat less in width than the box A, and the side pieces, *c c*, of the comb-frames have each two screws, *g g*, in them, which serve to regulate the distance between the comb-frames when the latter are adjusted in the hive, the screws of one frame bearing against the side pieces of the adjoining one, as shown clearly in Fig. 2. The space between the comb-frames, it will be seen, may be regulated as desired by screwing the screws *g* a greater or less distance into the side pieces, *c c*.

Within the hive A, at one side of it, there is inserted a slide, E, the length of which is equal to the internal width or depth of the hive. This slide has two strips, *h h*, attached vertically to it, one near each end, and in line with the side pieces, *c c*, of the comb-frames, the screws *g* of the adjoining comb-frame bearing against the strips *h h*.

This slide and strips, it will be seen, serve as a key to retain the comb-frames in proper position within the hive, and strips *h h*, of greater or less thickness, may be used to suit the adjustment of the comb-frames. If the latter are placed quite near together, the strips *h* will of course require to be thicker than they would were the comb-frames placed at a considerable distance apart. The strips *h h* may be readily attached to and detached from the slide E, the former being simply tacked to the latter.

By having the comb-frames thus arranged it will be seen that they may be readily removed from the hive and without annoying or exasperating the bees, all that is required to effect this being simply withdrawing the slide E. In consequence of having the lower ends of the side pieces, *c c*, of the comb frames chamfered, as shown and described, a very small surface is in contact with the bottom of the hive, and the bees cannot glue them to the bottom. Were this allowed, some difficulty would be experienced in detaching them, and the bees consequently annoyed and rendered irascible.

The front side of the hive A at its lower end

does not extend quite down to the bottom of the hive, a space being allowed to receive a strip, F, which has an oblong opening, *i*, made in it to serve as a bee-entrance. (See more particularly Fig. 3.) Several strips, F, may be kept on hand, having openings *i* of different dimensions, so that any one of the strips may be fitted in or underneath the lower end of the front side of the hive and a bee-entrance of greater or less dimensions, as desired, obtained at any time.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The arrangement of the adjusting-screws *g* upon the sides of the comb-frames as herein shown and described, so as to regulate the space between the frames at pleasure.

2. The arrangement of the entrance-strips F with the hive-front in the manner herein shown and described.

LEONARD KENNEDY.

Witnesses:

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T. SMITH.